

Patent Application No. 09/821,168

IN THE CLAIMS:

Please amend claims 1, 5, 6, 10, and 12, and cancel claim 4 as follows:

1 Claim 1. (currently amended) A method of operating a mobile agent
2 that travels through a network of a number of computers, wherein the
3 mobile agent is executed in a sequence of stages and wherein each stage
4 comprises a set of places, the method comprising the following steps:
5 executing the mobile agent in at least one of the set of places of a
6 respective one of the stages,
7 evaluating in which place of the respective stage the mobile agent
8 has been executed successfully,
9 agreeing on a primary place among the set of places,
10 aborting and/or undoing any operation in connection with the mobile
11 agent in any other place of the respective stage, ~~and~~
12 moving a modified mobile agent resulting from the successful
13 execution to the next stage ~~from~~ to at least two forwarding places, and
14 generating a decision in each stage, the decision including the
15 primary place that corresponds to the place in which the mobile agent has
16 executed successfully, the set of places of the next stage to which the
17 modified mobile agent is moved, and the resulting modified mobile agent.

1 Claim 2. (original) The method of claim 1 wherein the steps are
2 repeated for any one of the sequence of stages.

1 Claim 3. (original) The method of claim 1 wherein the mobile
2 agent is executed sequentially in the set of places of the respective
3 stage, and wherein the mobile agent is not executed anymore in subsequent
4 places after successful execution in one of the set of places and
5 agreement on this successful execution.

1 Claim 4. (cancelled)

1 Claim 5. (currently amended) The method of ~~claim 4~~ claim 1 wherein
2 at least one of the primary place and/or the set of places of the next
3 stage and/or the resulting modified mobile agent is confirmed to at least
4 all other places of the respective stage except the primary place.

1 Claim 6. (currently amended) The method of ~~claim 4~~ claim 1 wherein
2 at least one of the primary place and/or the set of places of the next

Patent Application No. 09/821,168

3 stage and/or the resulting modified mobile agent is moved to all places of
4 the next stage.

1 Claim 7. (original) The method of claim 6 wherein the move is
2 performed as a reliable forward function.

1 Claim 8. (original) The method of claim 1 wherein the steps are
2 managed by a fault-tolerance enabler (FTE) which is independent of the
3 mobile agent.

1 Claim 9. (original) The method of claim 8 wherein the FTE
2 travels with the mobile agent to the set of places of the respective
3 stage.

1 Claim 10. (currently amended) A computer program product comprising
2 program code means for use for operating a mobile agent that travels
3 through a network of a number of computers, wherein the mobile agent is
4 executed in a sequence of stages and wherein each stage comprises a set of
5 places, the computer program product comprising instructions for:
6 executing the mobile agent in at least one of the set of places of a
7 respective one of the stages,
8 evaluating in which place of the respective stage the mobile agent
9 has been executed successfully,
10 agreeing on a primary place among the set of places,
11 aborting and/or undoing any operation in connection with the mobile
12 agent in any other place of the respective stage, and
13 moving a modified mobile agent resulting from the successful
14 execution to the next stage ~~from~~ to at least two forwarding places, and
15 generating a decision in each stage, the decision including the
16 primary place that corresponds to the place in which the mobile agent has
17 executed successfully, the set of places of the next stage to which the
18 modified mobile agent is moved, and the resulting modified mobile agent.

1 Claim 11. (original) Computer program product according to claim
2 10, wherein the program code means is stored on a computer-readable
3 medium.

1 Claim 12. (currently amended) A network of a number of computers in
2 which a mobile agent is traveling through, wherein the network comprises a
3 sequence of stages, wherein each stage comprises a set of places, and

Patent Application No. 09/821,168

4 wherein the mobile agent is executed in at least one of the set of places
5 of a respective one of the stages, the network comprising:
6 means for evaluating in which place of the respective stage the
7 mobile agent has been executed successfully,
8 means for agreeing on a primary place among the set of places, means
9 for aborting and/or undoing any operation in connection with the mobile
10 agent in any other place of the respective stage, and
11 means for moving a modified mobile agent resulting from the
12 successful execution to the next stage ~~from~~ to at least two forwarding
13 places, and
14 means for generating a decision in each stage, the decision
15 including the primary place that corresponds to the place in which the
16 mobile agent has executed successfully, the set of places of the next
17 stage to which the modified mobile agent is moved, and the resulting
18 modified mobile agent.

1 Claim 13. (previously presented) The method of claim 1, wherein
2 the mobile agent is a computer program that acts autonomously on behalf of
3 an agent owner or user and that travels through a network of a number of
4 computers.

1 Claim 14. (previously presented) The computer program product of
2 claim 10, wherein the mobile agent is a computer program that acts
3 autonomously on behalf of an agent owner or user and that travels through
4 a network of a number of computers.

1 Claim 15. (previously presented) The network of claim 12, wherein
2 the mobile agent is a computer program that acts autonomously on behalf of
3 an agent owner or user and that travels through a network of a number of
4 computers.

1 Claim 16. (previously presented) The method of claim 1, wherein
2 non-primary places are configured to verify the modified mobile agent has
3 successfully arrived at the set of places of the next stage to which the
4 modified mobile agent is moved.

1 Claim 17. (previously presented) The computer program product of
2 claim 10, wherein non-primary places are configured to verify the modified

Patent Application No. 09/821,168

3 mobile agent has successfully arrived at the set of places of the next
4 stage to which the modified mobile agent is moved.

1 Claim 18. (previously presented) The network of claim 12, wherein
2 non-primary places are configured to verify the modified mobile agent has
3 successfully arrived at the set of places of the next stage to which the
4 modified mobile agent is moved.